

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027489**Date Inspected:** 20-Apr-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Skyway**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Skyway**Summary of Items Observed:**

Quality Assurance (QA) Inspector Danny Smith arrived at the new San Francisco Oakland Bay Bridge to observe, document and perform a general visual verification and NDT. Upon arrival as noted above the QA Inspector observed Quality Control (QC) on site performing welding inspection.

**Skyway Guard Rail:**

The QA Inspector at random intervals, observed ABF welder Jayson Collins (ID 8128) perform the Shielded Metal Arc Welding (SMAW) process in the 3G/4G vertical/overhead position on face "A" of the guard rail brackets at the East bound lane gate #15 as per change order #179. The welder was observed utilizing 3.2mm E7018-H4R electrodes obtained from a baking oven and drawing amperage of 123. QC Inspector was on hand to monitor the welding, parameters as they apply to ABF-WPS-D1.5-F1200A. On subsequent observations the welder was observed cleaning the work between passes by employing a small disc grinder, brushes and compressed air. Later in the shift he QA Inspector observed the QC Inspector perform 100% Magnetic particle Test (MT). The QC informed the QA Inspector no relevant indications were found on this date. The QA Inspector noted the QC Inspector performed MT while the welds were still hot and not at ambient temperature. The QA Inspector noted the work being performed is per AWS D1.1 and no NDT is required. Later in the shift the QA Inspector observed ABF personnel install the stainless steel track for the gate to run on.

The QA Inspector at random intervals, observed ABF welder Jayson Collins (ID 8128) perform the Shielded Metal Arc Welding (SMAW) process in the 3G/4G vertical/overhead position on face "A" of the guard rail brackets at the East bound lane gate #14 as per change order #179. The welder was observed utilizing 3.2mm E7018-H4R

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## WELDING INSPECTION REPORT

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electrodes obtained from a baking oven and drawing amperage of 125. QC Inspector was on hand to monitor the welding, parameters as they apply to ABF-WPS-D1.5-F1200A. On subsequent observations the welder was observed cleaning the work between passes by employing a small disc grinder, brushes and compressed air. The QA Inspector noted the welding at this location to be complete at this time on this date. Later in the shift the QA Inspector observed ABF personnel install the stainless steel track for the gate to run on.

The QA Inspector at random intervals, observed ABF welder Jayson Collins (ID 8128) perform the Shielded Metal Arc Welding (SMAW) process in the 3G/4G vertical/overhead position on face "A" of the guard rail brackets at the East bound lane gate #13 as per change order #179. The welder was observed utilizing 3.2mm E7018-H4R electrodes obtained from a baking oven and drawing amperage of 130. QC Inspector was on hand to monitor the welding, parameters as they apply to ABF-WPS-D1.5-F1200A. On subsequent observations the welder was observed cleaning the work between passes by employing a small disc grinder, brushes and compressed air. The QA Inspector noted the welding at this location to be not completed at this time on this date when the QA Inspector departed from the work location.

Work performed appears to be in general compliance with contract documents.



Skyway @ gate #15/Welder performing SMAW on brackets to gate.



Skyway @ gate #15/QC performing MT

### Summary of Conversations:

Conversations included welding work being performed on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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**Inspected By:** Smith,Danny

Quality Assurance Inspector

**Reviewed By:** Levell,Bill

QA Reviewer

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